WHAT IS CLAIMED IS:

1. An artificial disc prosthesis system comprising:

(a) a stabilizing element; and

(b) a scaffold assembly adapted to removably retain the stabilizing element when the artificial disc prosthesis system is disposed between two vertebrae, wherein the scaffold assembly is capable of accommodating stabilizing elements of a plurality of shapes or sizes.

2. The artificial disc prosthesis system of claim 1, wherein the stabilizing element is a disc prosthesis.

3. The artificial disc prosthesis system of claim 1, wherein the stabilizing element is a fusion prosthesis.

4. The artificial disc prosthesis system of claim 1, wherein the scaffold assembly comprises a base adapted to be attached to a vertebral end plate without covering the entire surface of the end plate.

5. The artificial disc prosthesis system of claim 4, wherein the base is adapted to be attached to a central portion of the vertebral end plate without covering a central portion of the end plate.

6. The artificial disc prosthesis system of claim 4, wherein the base is adapted to be attached to a central portion of the vertebral end plate without covering the peripheral region of the end plate.

7. The artificial disc prosthesis system of claim 1, wherein the stabilizing element is a disc prosthesis and the scaffold assembly comprises a first base adapted to be attached to a first vertebral end plate and a second base adapted to be attached to a second vertebral end plate, and wherein the scaffold assembly further

comprises at least one buttress removably attached to each base, such that the buttresses removably retain the disc prosthesis between two bases when the artificial disc prosthesis system is disposed between two vertebrae.

8. The artificial disc prosthesis system of claim 7, wherein the scaffold assembly further comprises a first plate attached to the first base and a second plate attached to the second base, the second plate disposed opposite and in parallel relation to the first plate, such that the plates removably retain the disc prosthesis between the two plates when the artificial disc prosthesis system is disposed between two vertebrae.

9. The artificial disc prosthesis system of claim 8, wherein the first plate and the second plate have high friction outer surfaces.

10. The artificial disc prosthesis system of claim 8, wherein the first plate and the second plate have low friction outer surfaces.

11. The artificial disc prosthesis system of claim 1, wherein the stabilizing element is a disc prosthesis comprising a concave surface attached to a first prosthesis base by at least one flexible support and a complementary convex surface disposed on a second prosthesis base positioned opposite the first prosthesis base, wherein the concave surface and the convex surface form a rotating joint, and further wherein the at least one flexible support is capable of flexing to provide shock absorption when the artificial disc prosthesis system is disposed between two vertebra.

12. The artificial disc prosthesis system of claim 11, wherein the concave surface is attached to the first prosthesis base by two or more flexible supports.

13. The artificial disc prosthesis system of claim 1, wherein the scaffold assembly comprises a material selected from metal, ceramic and plastic.

14. The artificial disc prosthesis system of claim 1, wherein the scaffold assembly comprises a material selected from cobalt chrome or titanium.

15. A method for revising a stabilizing element, the method comprising:

(a) removing a first stabilizing element from an intervertebral space, wherein the first stabilizing element was removably retained in the intervertebral space by a scaffold assembly; and

(b) inserting a second stabilizing element into the intervertebral space such that the second stabilizing element is removably retained in the intervertebral space by the scaffold assembly;

wherein the scaffold assembly remains in the intervertebral space during the removal of the first stabilizing element and the insertion of the second stabilizing element.

16. The method of claim 15, wherein the first and second stabilizing elements are independently selected from the group consisting of fusion prostheses and disc prostheses.

17. The method of claim 15, wherein the first and second stabilizing element have a different size, shape, or size and shape.

18. A disc prosthesis comprising:

(a) a concave surface attached to a first base; and

(b) a convex surface attached to a second base;

wherein the concave surface and the convex surface together form a rotating joint and further wherein at least one the of concave and convex surfaces is attached to its based through at least one flexible support capable of flexing to provide shock absorption when the artificial disc prosthesis is disposed between two vertebra.

19. The disc prosthesis of claim 18, wherein the concave surface is attached to the first base through at least one flexible support.

20. The disc prosthesis of claim 18, wherein the convex surface is attached to the second base through at least one flexible support.

21. A disc prosthesis comprising:

(a) a first external cup;

(b) a first internal cup comprising a first inner surface, the first internal cup mounted to the inside of the first external cup;

(c) a second external cup; and

(d) a second internal cup comprising a second inner surface complementary to the first inner surface, the second internal cup mounted to the inside of the second external cup;

wherein the first and second internal cups are disposed opposite one another such that the first and second inner surfaces contact one another to form a rotating joint.

22. The disc prosthesis of claim 21, wherein the first internal cup is centered within the first external cup and the second internal cup is centered within the second external cup.

23. The disc prosthesis of claim 21, wherein the first internal cup is offset from the center of the first external cup and the second internal cup is offset from the center of the second external cup.

24. The disc prosthesis of claim 21, wherein one of the internal cups has a smaller diameter than the other internal cup such that the smaller internal cup fits at least partially within the larger internal cup when the first and second inner surfaces are in contact.

25. The disc prosthesis of claim 21, wherein one of the external cups has a smaller diameter than the other external cup such that the smaller external cup fits at least partially within the larger external cup when the first and second inner surfaces are in contact.

26. The disc prosthesis of claim 21, wherein the first inner surface is mounted on at least one flexible support capable of flexing to provide shock absorption.

27. An artificial disc prosthesis system comprising:

(a) a stabilizing means for stabilizing two adjoining vertebrae in the absence of a vertebral disc; and

(b) a retaining means for removably retaining the stabilizing means when the artificial disc prosthesis system is disposed between two vertebrae, wherein the retaining means is capable of accommodating stabilizing means of a plurality of shapes and sizes.